



All Databases

Search PubMed

PubMed
www.pubmed.gov
A service of the National Library of Medicine
and the National Institutes of Health

My NCBI [2]
[Sign In] [Register]

PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books



for

Go Clear

☒ Limits ☐ Preview/Index ☐ History ☐ Clipboard ☐ Details

Limits: Publication Date from 2005 to 2005

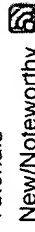
About Entrez

Text Version ☐ 1: Int J Oncol. 2005 Nov;27(5):1257-63.

Related Articles, Links

Entrez PubMed

Overview
Help | FAQ
Tutorials



New/Noteworthy
E-Utilities

PubMed Services

Journals Database
MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

Special Queries

LinkOut

My NCBI

Related Resources

Order Documents

NLM Mobile

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

Expression of human telomerase reverse transcriptase gene and protein, and of estrogen and progesterone receptors, in breast tumors: preliminary data from neo-adjuvant chemotherapy.

Kammori M, Izumiyama N, Hashimoto M, Nakamura K, Okano T, Kurabayashi R, Naoki H, Honma N, Ogawa T, Kaminishi M, Takubo K.

Division of Breast and Endocrine Surgery, Department of Surgery, Graduate School of Medicine, The University of Tokyo, Japan. kanmori-dis@umin.ac.jp

Human telomerase reverse transcriptase (hTERT), the catalytic subunit of telomerase, is very closely associated with telomerase activity. Telomerase has been implicated in cellular immortalization and carcinogenesis. In situ detection of hTERT will aid in determining the localization of telomerase-positive cells. The aim of this study was to detect expression of hTERT mRNA, hTERT protein, estrogen receptor (ER) and progesterone receptor (PR) in paraffin-embedded breast tissue samples and to investigate the relationship between hTERT expression and various clinicopathological parameters in breast tumorigenesis. We used in situ hybridization (ISH) to examine hTERT gene expression, and immunohistochemistry (IHC) to examine expression of hTERT protein, ER and PR, in breast tissues including 64 adenocarcinomas, 2 phyllode tumors and their adjacent normal breast tissues. hTERT gene expression was detected by ISH in 56 (88%) carcinomas, but in neither of the 2 phyllode tumors. hTERT protein expression was detected by IHC in 52 (81%) carcinomas, but in neither of the 2 phyllode tumors. Moreover, ER and PR were expressed in 42 (66%) and 42 (66%) carcinomas, respectively, and in neither of the 2 phyllode tumors. In 4 cases of breast carcinoma that strongly expressed hTERT gene and protein before treatment, neo-adjuvant chemotherapy led to disappearance of gene and protein expression in all cases. There was a strong correlation between detection of hTERT gene expression by ISH and of hTERT protein by ICH in tissue specimens from breast tumors. These results suggest that detection of hTERT protein by ICH can be used to distinguish breast cancers as a potential diagnostic and therapeutic marker.

PMID: 16211220 [PubMed - indexed for MEDLINE]

Jun 14 2006 10:29:54